

REMARKS

Claims 1-55 are presently pending in the application. Claims 1, 2, 14-24, and 36-55 were rejected under 35 U.S.C. 102(e) as being anticipated by U. S. Patent Application Serial No. 2001/0030975 ("Limb"). Claims 3-13 and 25-35 were rejected under 35 U.S.C. 103(a) as being unpatentable over Limb in view of U. S. Patent No. 6,088,346 ("Du").

Applicant respectfully disagrees that independent claims 1 and 23 as well as claim 45, as amended, are anticipated by Limb; specifically, each claimed step is not met by the teachings of Limb, which is a requirement for a 35 U.S.C. 102(e) rejection, for at least the reasons stated hereinbelow.

The claimed step of determining whether a given packet of the plurality of packets is a multicast packet or a unicast packet, wherein a multicast packet is designated for transmission from a plurality of modulators and a unicast packet is designated for transmission from only one modulator is not taught in the Limb patent. More specifically, the present invention is directed towards, after receiving at least one transport stream, which each comprises a plurality of packets, determining whether each packet of the transport stream is designated for *multicast* or *unicast* from the multimodulator. Furthermore, multicast packets are transmitted from a plurality of modulators of the multimodulator, and unicast packets are transmitted from one modulator of the multimodulator. Referring to FIG. 7A of the present application, multimodulator 700 includes a plurality of modulators 708a-d each having an output port. When a packet is determined to be a multicast packet, the packet is provided to more than one of the modulators 708a-d for transmission. When a packet is determined to be a unicast packet, the packet is provided to a single modulator 708a-d.

This step is inherently different than and not equivalent to Limb's teachings in paragraphs [0022-0023], [0029-0032], [0036], [0043-0046], and [0048-0052]. As specifically stated in Limb [0049], a CMTS defines at least one group of devices that may each receive a single broadcast message. In this manner, the group is defined as a *multicast group*. The CMTS may then communicate with the multicast group by transmitting **a packet to the multicast group**. Inherently then, the packet, not a plurality of packets, is provided from a single output port of the CMTS. Typically, the packet includes a header that contains the destination address of the multicast group along with a packet that instructs the devices along the way to not drop the packet from transmission. In this manner, each device in the multicast group receives the packet.

To further the argument, claims 2 and 24 of the present invention further detail the method of providing a multicast of a packet by associating each determined multicast packet with a modulator identifier, which corresponds to modulators 708a-d. It is respectfully submitted that Limb does not teach or imply associating a modulator identifier with a multicast packet.

It is respectfully submitted that the 35 U.S.C. 102(e) rejection for independent claims 1, 23, and 45 has been overcome by the above remarks and should be allowable over the cited art. Additionally, dependent claims 2-22, 24-44, and 49-51 further limit independent claims 1, 23, and 45, respectively; and, therefore, should also be allowable over the cited art. Claims 46-48 were canceled.

Claims 3-13 and 25-35 were rejected under 35 U.S.C. 103(a) as being unpatentable over Limb in view of Du. Limb is directed towards the interoperability of devices having different protocols; whereas, Du is directed towards transmitting cells from a transceiver to a plurality of transceivers. It is respectfully submitted that there is no motivation to combine Limb and Du to render the present invention unpatentable. Du teaches that a transceiver includes a buffer memory for each coupled transceiver. A cell that is multicasted is stored in each buffer memory that corresponds with a receiving transceiver. More specifically, as stated in col. 2, lines 45-52, a first buffer memory is used for storing a cell whose destination is another transceiver which is assigned to the respective first buffer memory. Applicant believes that this is not obvious, either alone or combined with Limb, as the present invention, which, as stated above, determines a multicast and a unicast packet, and, in the event of a multicast packet, modulates the packets from a plurality of modulators 708a-d, prior to transmission.

Regardless, as stated hereinabove with the 35 U.S.C. 103(a) rejection, it is believed that independent claims 1 and 23 are patentable over the cited art, and therefore, it is believed that their respective dependent claims are also patentable over the cited art.

Reconsideration and reexamination of the present application is requested in view of the foregoing amendment and in view of the following remarks.

CONCLUSION

The foregoing is submitted as a full and complete response to the Office Action dated June 30, 2006. Claims 1-45 and 49-51 will be pending in the present application upon entry of the present amendment, with claims 1, 23, and 45 being independent. Based on the amendments and remarks set forth herein, Applicant respectfully submits that the subject patent application is in condition for allowance. Because the claims may include additional elements that are not taught or suggested by the cited art, the preceding arguments in favor of patentability are advanced without prejudice to other bases of patentability.

Upon entry of the foregoing Response, the above-identified patent application includes 3 independent claims. Because Applicant has previously paid for 55 total claims and 3 independent claims, Applicant submits that no additional fee is due. Should it be determined that any additional fee is due or any excess fee has been received, the Commissioner is hereby authorized to charge any fees which may be required or credit any overpayment to deposit account #19-0761.

Should the Examiner have any comments or suggestions that would place the subject patent application in better condition for allowance, he is respectfully requested to telephone the undersigned agent at the below-listed number.

Respectfully submitted:

SEND CORRESPONDENCE TO:

Scientific-Atlanta, Inc.
Intellectual Property Dept. MS 4.3.510
5030 Sugarloaf Parkway
Lawrenceville, GA 30044

By: 

WM. BROOK LAFFERTY
Attorney of Record
Reg. No. 39,259
Phone: (770) 236-2114
Fax No.: (770) 236-4806
